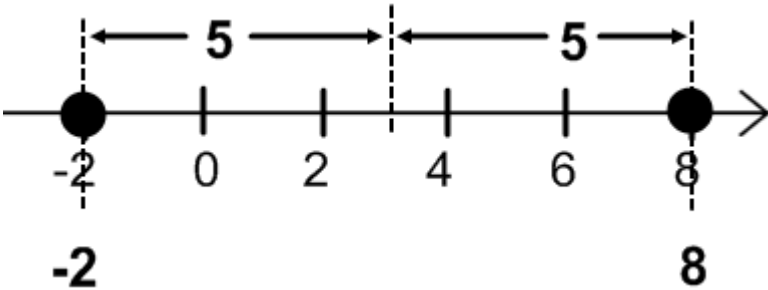
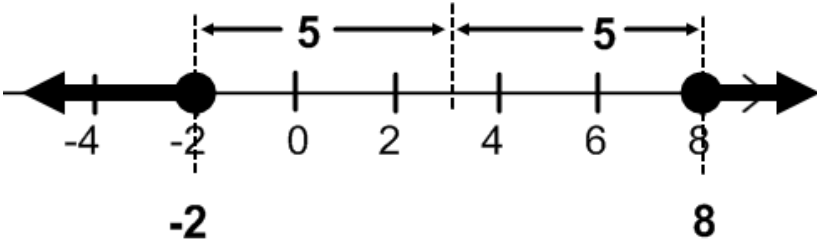


Constructed Response

1	Solve $ x - 3 = 5$ & draw on the number line.	Explain:
Case 1	$ +5 $	<p>The absolute value is the distance between zero and a number, 5 is that distance in this equation. Therefore the expression inside the absolute value symbols $x - 3$ can equal to a positive 5 (case 1) or a negative 5 (case 2).</p> <p>In case 1 with a +5 $x = 8$</p> <p>In case 2 with a -5 $x = -2$.</p> <p>The dots (closed circles) represent the solution.</p>
	$ x - 3 = 5$	
Case 2	$ -5 $	
Case 1	$ x - 3 = 5$	Case 2
$x - 3 = 5$		$x - 3 = -5$
$x = 8$		$x = -2$
		

2	Solve $ x - 3 \geq 5$ & draw on the number line.	Explain your solution & explain what is different from problem 1.
Case 1	$ x - 3 \geq 5$	Case 2
$x - 3 \geq 5$		$x - 3 \leq -5$
$x \geq 8$		$x \leq -2$
		
$x \leq -2$		$x \geq 8$
<p>x is less than or equal to -2. x is greater than or equal to 8</p>		
<p><u>Explanation of the symbol switch in case 2:</u> In equations the numerical value was made negative. In inequalities the expression is made negative. $-(x - 3) \geq 5$ $-(x - 3) \cdot (-1) \geq 5 \cdot (-1)$ $x - 3 \leq -5$</p> <p>An inequality gives a solution set. An absolute inequality gives two solutions sets.</p>		